SUMMARY

Detection of Mycoplasma synoviae in the Region of Izmir Province by Molecular Methods

In this study; 375 tracheal swabs from five different commercial layer and broiler poultry in İzmir were examined by vlhA gene based PCR.

In our study; at the end of the culture; *M. synoviae* were identified at the rate of 12.8 % from whole samples. The percentage of *M. synoviae* as per layer (1st, 2nd, 3rd) is shown as follows: 32.2 %, 29.3 %, 2.7 %. *M. synoviae* has not been detected at none of two different broilers.

On the other hand; in the studies that has been done with vlhA based PCR 12 positive samples were detected per 375 samples. The percentage of *M. synoviae* as per layer (1st, 2nd, 3rd) is shown as follows: 1.3 % (1 positive sample), 6.7 % (5 positive samples), 8 % (6 positive samples). The samples taken from broilers had paralel results between cultured and PCR which were both negative.

In our study; *M. synoviae* was detected with PCR in layers. But at the samples taken from broilers *M. synoviae* couldn't been identified. The study showed that PCR methods is faster and more reliable than cultured.

Keywords: M. synoviae, identification, vlhA gene, PCR